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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,385	03/22/2005	Jerome Julien Guy Levy	3712036-00497	4309
29157	7590	10/05/2010	EXAMINER	
K&L Gates LLP			THAKUR, VIREN A	
P.O. Box 1135				
CHICAGO, IL 60690			ART UNIT	PAPER NUMBER
			1782	
			NOTIFICATION DATE	DELIVERY MODE
			10/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

Office Action Summary	Application No. 10/528,385	Applicant(s) LEVY ET AL.	
	Examiner VIREN THAKUR	Art Unit 1782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. As a result of the amendment to the claims, the rejections of claims 1-9 and 11-16 under 35 U.S.C. 112, second paragraph have been withdrawn.
2. As a result of filing a certified copy of the foreign priority document (Application No. EP02020949.0), the references to Scheindel (US 6880732) and Riviere (FR 2829748) have been withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1782

5. Claims 1-4,9,12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riviere (WO9730600) in view of Smadar et al. (US 3677443), Getz (US 2294172) and Morley et al. (US 4346120) and in further view of Packaging Technology, Ciabatti (EP 0509967), Clauwert (EP1061006) and Schultz (US 3827607) and in further view of Hall (US 5698247), Destephano et al. (US 6379736) and Cox et al. (US 5633029), for the reasons given in the previous Office Action, mailed March 19, 2010 and in further view of Cornelius (US 3969531).

Regarding the limitation in claims 1 and 16 of “a partially frozen dessert” it is noted that Riviere et al. already teaches that the final product is a scoopable (see page 5, lines 23-24 of the translation), malleable ice cream composition that is capable of being aerated by incorporating a gas into the frozen composition (see page 7, lines 20-24). In any case, it is noted that Morley et al. already teaches when injecting an aerating gas, such as nitrous oxide into a frozen confection, to employ a partial freezing temperature, while injecting the expansion gas, for the purpose of achieving a soft serve dessert (see column 7, line 50 to column 8, line 17). Therefore, Morley et al. teaches that it has been advantageous to whip a composition comprising fat and milk proteins at between 15-24°F (i.e. -9 to -4.4°C) for the purpose of achieving the a particular whippability and specific gravity. It would further have been obvious to one having ordinary skill in the art, that at such partial freezing temperatures, there would have been a reasonable expectation that the blending of all the components as well as the incorporation of an aeration gas would have been easier, then if the product had been fully frozen (i.e. in a pasty/soft-serve type state). It is further noted that Morley et al.

Art Unit: 1782

teaches using sunflower oil (column 4, lines 64), which Riviere also teaches can be used as the fat component (see page 12, lines 7-10). Obviously, any water present at this stage would also have frozen since water freezes below 32°F.

In addition however, it is noted that Cornelius has been relied on to generically teach that nitrous oxide dissolves in the liquid during blending of the frozen comestible in a semi-frozen state, which subsequently releases from the frozen comestible when dispensed (see abstract and column 4, lines 6-20). Thus, Cornelius further teaches that when dissolving nitrous oxide, that during the partial freezing that the dissolved nitrous oxide gas, "leaves the portion of the liquid being frozen in the chamber to become absorbed by the remaining liquid portion which can now take on additional gas since it has a lower temperature than the blending and storage device" (column 4, lines 10-14) which thus facilitates aeration of the product once the product has been dispensed from the pressurized container. Therefore, in view of the teachings of the prior art and in view of the knowledge of one having ordinary skill in the art, it is noted that it would have been obvious to the ordinarily skilled artisan to inject an aerating gas, such as nitrous oxide to a partially frozen product since this would facilitate dissolution of the gas into the semi-solid/semi-liquid composition, which in turn would aide in achieving the desired over-run during dispensing. This would further have been the case since it would have been obvious to the ordinarily skilled artisan that there would have been a greater expectation of success to dissolve an expansion gas in a more flowable product compared to a more solid product.

Art Unit: 1782

Further regarding claim 16, which recites injecting a propellant gas into the second compartment, and is virtually insoluble in the partially frozen dessert, it is noted that the combination, as applied to claim 1 already teaches that it would have been obvious to have separated the propellant from the product and thus contain the propellant in a compartment separate from the frozen product.

Regarding claim 2, the combination already teaches that the frozen dessert is an ice-cream product.

6. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above, and in further view of Scheindel (EP 0136104) and Lowy et al (US 3710538), for the reasons given in the previous Office Action, mailed March 19, 2010.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above, and in further view of DeVries (US 4967931) as further evidenced by Stogo ("Ice Cream and Frozen Desserts"), for the reasons given in the previous Office Action, mailed March 19, 2010.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above and in further view of

Youel (US 5277336) and in further view of Obrist (US 5799469), Mekata (EP1013566) and Heimgartner (US 3225967).

Although the references to Scheindel (US 6880732) and Riviere (FR2829748) have been withdrawn, claim 8 still stands rejected in view of the references above, for the reasons given in the Office Action, mailed March 19, 2010.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above and in further view of Scheindel (EP 0136104), Orbst (US 5799469) and Youel (US 5277336), for the reasons given in the previous Office Action, mailed March 19, 2010.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above and in further view of GB1232929 and Fiedler (US 4659575), for the reasons given in the previous Office Action, mailed March 19, 2010.

Response to Arguments

11. On page 8 of the response, applicants assert that the invention allows for the packaging a thick but malleable frozen dessert in a pressurized receptacle with a high enough pressure given the viscosity of the product. Applicants further assert that the

Art Unit: 1782

advantages of the invention are achieved by providing two different gases for dispensing the product, one of which has the propulsion function and the other has the expansion function, where each of these gases is contained in a separate chamber of a container.

It is noted however, that the art already teaches the concept of providing a chambered pressurized container, where a propellant gas pushes a piston or bag, for instance which releases a product which comprises an aerating gas therein that only aerates the product upon dispensing from the pressurized container.

Therefore, it is noted that the art teaches that applicants are not the first to employ a piston or bag in can pressurized container which employs a propellant separate from a product containing compartment, which comprises an aerating gas which aerates the product upon dispensing.

12. On page 9 of the response, applicants assert that Riviere is directed toward a frozen dessert that is spoonable at freezing temperatures without the necessity of the product being expanded by the incorporation of a gas or passing through a nozzle under pressure.

This argument is not persuasive, since the translation of Riviere teaches on page 16, lines 6-20 teaches that the product can be placed into a pressurized container, such as an aerosol container, where an aerating gas has been injected into the product, such as nitrous oxide. Riviere also teaches the inclusion of a propellant gas.

Art Unit: 1782

13. On page 9 of the response, applicants assert that Morely is directed toward a frozen food that emulates the features of soft serve ice cream but at lower temperatures.

It is noted however, that such a product is still related, especially since Morely teaches a product that has an aerating gas such as nitrous oxide incorporated therein and where a degree of overrun has been achieved after dispensing (see column 7, line 50 to column 8, line 17). It is noted that absent any clear and convincing evidence to the contrary, that the soft-serve type product taught by Morely is reasonably similar to the spoonable product taught by Riviere. Morely even teaches on the top of column 8, that the product is packaged in an extrudable, "pressure-tight" container (see column 8, line 9).

14. Further on page 9, regarding the references to Hall, Destephano and Cox, applicants assert that these products are different from the claimed product and from Riviere. It is noted however, that the claims do not recite any particular composition for the product. Furthermore, Hall, Destephano and Cox have been relied on as evidence that the use of a freezing tunnel to freeze frozen confections which retain a paste like nature (i.e. soft gelato, for instance) have been conventional expedients for freezing a frozen confection to below -10°C, for instance. These references are pertinent since Riviere teaches freezing the final product in the pressurized container at -18°C, for instance.

Art Unit: 1782

15. Further on page 9 of the response, applicants assert that Smadar is directed to a non-dairy food product having a texture and eating characteristics of soft-serve ice cream.

It is noted however, that Smadar et al. still nonetheless, teaches an ice cream product and applicants' claims do not exclude nor do they specify any particular components of the ice cream product.

16. Applicants urge on page 10 of the response, that Smadar does not disclose the use of an insoluble propellant gas and a soluble expansion gas, let alone the use of the gases in separate compartments of a receptacle.

It is noted however, that Riviere already teaches the use of an aerating gas, such as nitrous oxide, and a propellant gas, such as nitrogen. It is noted that even applicants process employs nitrogen as a propellant. Therefore, Riviere teaches a frozen dessert that can be dispensed from an aerosol container, which can include an aerating gas such as nitrous oxide and which also uses an insoluble propellant such as nitrogen for dispensing the composition. Smadar, nonetheless, has been relied on to teach dissolution of an expansion gas such as nitrous oxide into the ice cream, for the purpose of providing aeration when the final product has been dispensed.

Although Smadar indicates that this additional pressure might not be necessary, this would wholly have been a function of the particular amount of the expansion gas incorporated into the product and the particular resultant pressures generated therefrom and the particular pressures desired. Thus, to still employ additional pressure to the

Art Unit: 1782

outside of the bag comprising the product would have been obvious for the purpose of creating the appropriate degree of dispensing.

17. Further on page 10 of the response, applicants assert that many of the reference teach away from each other and thus the skilled artisan would have no reason to combine the cited references to arrive at the present claims.

Applicants assert that both Riviere and Smadar teach that gas is not necessary for expansion of a product. It is noted however, that Riviere clearly teaches on page 16 of the translation that an aerating gas can be employed when using a pressurized container to dispense the frozen dessert. Applicants provide further examples of the differences between Clauwert, Scheindel, Getz, Morely and Smadar. It is noted however, that Clauwert merely teaches that the particular type of container that applicants' appear to employ has been conventionally employed for the same generic purpose of providing a propellant gas separated from the food product compartment, where the food product compartment includes the food and an aerating gas. The aerating gas is also similar to Riviere and applicants, in that it is nitrous oxide. Clauwert even teaches that separation of the propellant from the food product facilitates achieving the desired dispensability of the aerated, viscous product from the container, and that this separation facilitates achieving more complete dispensing since the piston (or any other type of follower) can facilitate in pushing out more of the product. Ciabatti has only been relied on as further evidence of this conventional type of pressurizing container. Getz has only been relied on to teach that dissolving nitrous oxide into

Art Unit: 1782

cream composition, which when dispensed, results in the increased expansion of the product (page 1, left column, lines 33-50).

18. Applicants further assert on pages 10 to 11 of the response that due to the number of references, the suggestion to combine becomes less plausible when the necessary elements can only be found in a large number of references and ‘the extent to which such suggestion must be explicit in...the references, is decided on the facts of each case, in light of the prior art and its relationship to applicants’ invention.’

Applicants further assert on page 11 that one should not use hindsight to pick and choose among isolated disclosures and thus urge that one having ordinary skill in the art would have no reason to combine the cited references.

This urging is not persuasive. It is noted that Riviere already teaches the steps of injecting a gas into a dessert composition and packaging such a composition into an aerosol pressurized container, and using a propellant gas for dispensing. Riviere teaches freezing the composition within the container to within applicants claimed temperatures. Therefore, Riviere is missing the particular type of pressurized container and the placement of the propellant in one compartment which is maintained separated from a food containing compartment. Nevertheless, the secondary references further teach that such containers have been conventionally employed for dispensing a food comprising an aerating gas therein, such that upon dispensing the product becomes aerated. The art further teaches incorporation of aerating gases into a partial frozen composition, wherein the pressures and temperatures as claimed have also been

Art Unit: 1782

taught, and the art teaches that incorporation of a gas during a partial frozen state can aide to achieve the desired degree of aeration during dispensing, due to the increased amount of the aerating gas that can be incorporated into the frozen dessert. Therefore, it is noted that on its' own, the use of a particular number of references is not persuasive and further does not overcome the prima facie case of obviousness. Additionally, it is not seen that elements of cited references have been picked and chosen to arrive at the present claims, since the references are related to the primary reference and in combination with the knowledge of one having ordinary skill in the art, further teach advantages or provide motivation for employing a particular step for packaging a frozen dessert.

Conclusion

19. It is further noted that Weinstein (US 3615718) also discloses pressurized dispensing from an aerosol type package of a soft ice cream (see column 3, line 65 to column 4, line 11), Which dissolves a propellant gas into the ice cream (see at least, the abstract).

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 1782

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIREN THAKUR whose telephone number is (571)272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steve Weinstein/
Primary Examiner, Art Unit 1782

/V. T./
Examiner, Art Unit 1782